



Cover image: **The Cell Biology of Metals.** A small number of transition metals are essential for all life on Earth. The male Fiddler Crab shown here is one of more than a million known species of arthropods, an ancient phylum containing greater than 80% of all described living animals, many of which utilize copper to carry oxygen in the respiratory protein hemocyanin. The cell biology of metals explores our current understanding of how these transition metals are acquired by living organisms, distributed to the proper cellular compartments and incorporated into specific apoproteins. Such knowledge is advancing our understanding of human health and disease, environmental adaptation and evolutionary biodiversity.

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